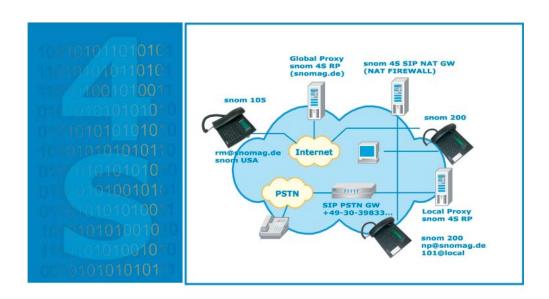
User Manual





snom 4S
SIP Registrar/Proxy
Version 2.41

snom 4S SIP Registrar/Proxy, Version 2.41, User Manual

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Legal Disclaimer

snom offers the software described in this manual for both open source operating systems as well as licensed operating systems. Whenever software that has been used under GPL or LGPL licensing conditions has been used by this product you can download the sources from http://www.snom.com/downlad/gpl/snom_ossdk or purchase a disc from snom for a nominal fee under the ordering code snom SDK CD.

Welcome to snom **45!**

SIP is becoming more and more accepted in the area of VoIP. Many companies are working on SIP solutions and making great products that will make telephony much easier and better. However, a easy to use and affordable SIP proxy is hard to get at the moment. But SIP telephony without a proxy makes no sense. That is why we are making this simple and straightforward proxy available.

snom 4S stands for "snom soft switch for small and medium enterprises". That means, the snom 4S proxy was designed for environments handling up to 1000 users with normal traffic. In environments where you need more features and better scalability, we would be happy to refer you to other companies offering carrier grade and feature-rich proxies that solve these problems.

This product is a Registrar/Proxy which means this software is responsible for locating users. Features like Follow me and group calling are therefore supported; however media services like mailbox and music on hold are not part of the software. You should use a media server for this.

Interoperability is important to us. We have tried to stick to the SIP standard as well as possible and tested the phones of other vendors. We hope that this will help to build up a flourishing VoIP telephone industry in which the products of the different vendors work together like the products in the computer industry do today. We believe that having a choice is good for you and therefore good for us.

This manual gives you a brief introduccion to the snom 4S SIP Registrar/Proxy. For additional snom 4S information, please visit our Web site at http://www.snom.com and if you have any comments and suggestions about snom 4S, please contact us through snom technology AG's support link Web site. We would appreciate your feedback.

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We hope that this SIP proxy helps you get VoIP up and running!

Thank you! Sincerely,

Dr. Christian Stredicke Vorstand

Nicolas Peter-Pohland Vorstand

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Logging in

The snom4S gives you access to "your" telephone system. You can use a web browser to log on into your system, see who was calling you, initiate conferences or change your preferences. You can do this from anywhere in the Internet. If your telephone is turned on or off does not matter.

The first time when you access the telephone system, you need to fill in your username and domain name just like the SIP telephone number that you have received with your account. Please don't use the sip: in front of the URL. Most of the modern web browsers remember your password when you type it in, so next time the browser will help you filling in name and password.

snom 4S SIP Telephony System Please enter your password Use your SIP account name (for example, test@snom.com) if you want to log on as a user. Use the domain name if you want to log on as a domain administrator. Use the administrator account name to log in as system administrator. After filling in the password, press Log On. The default account after installation is admin with no password, please change this when you make the system operative. The password is case sensitive. Account: christian@stredicke.de Password: Log On Cancel

After you are logged in, a session-key is assigned to you. This session key will be valid for one hour (this is the default value if it is not changed by your system administrator); each time you access another page with this session key, the timer for the session will be reset. If you want to explicitly delete your session, click on the logout button in the navigation bar.

Go To:				
Call List	Call Lo	a		? Help
Preferences		-		
Conference	Туре	Number	Time	Duration
Messages	taken	karthik	05 Aug 10:03	10
Logout	taken	karthik	05 Aug 09:23	46
Logout	taken	karthik	04 Aug 14:39	16
	taken	<u>karthik</u>	04 Aug 14:23	4
am currently:	missed	203.145.183.99:16015	31 Jul 15:59	
Section 2000	taken	203,145,183,99:16015	31 Jul 15:17	4
In the Office	missed	Christian Stredicke	29 Jul 19:25	
At Home	taken	Christian Stredicke	29 Jul 18:20	56
Hemomo	missed	Christian Stredicke	29 Jul 17:12	
On the Road (Number:)	taken	Christian Stredicke	29 Jul 17:11	
	taken	Christian Stredicke	29 Jul 17:04	
	missed	444@intern.snom.de	29 Jul 15:54	
Offline (Go to Mailbox)	taken	Christian Stredicke	29 Jul 14:19	
Offinite (Go to Manbox)	taken	203,145,183,99;10091	28 Jul 13:43	
Save	taken	203.145.183.99:10091	28 Jul 12:40	6
	taken	203.145.183.99:23677	28 Jul 09:52	365
	missed	<u>karthik</u>	26 Jul 08:46	
snom	taken	<u>karthik</u>	26 Jul 08:45	108
	taken	karthik	24 Jul 11:49	8

On the main screen of your log in you see the call list. This is the list of the last hundred calls that affected your account. By clicking on the number, you may connect to that number (this feature is not available on all systems). You can also see the time and the duration of the call.

On the left side of the screen you see a navigation bar. On the top of this navigation bar, you see the menu. Some menu items appear only if the functionality is available for you.

Initial Setup

In the preferences screen you may change your personal preferences. Please enter your display name here, this name will be downloaded into your endpoints (if they support plug and play).

Identity:		
Display Name:	Christian Stredicke	
Security:		
HTTP password:	•••••	
HTTP password (confirm):		
Redirection:		
Home Number:	12345678	
Mailbox Number:	christian@media.snom.com	
Mailbox Timeout:	20	
Ring Melody:		
Melody (<u>Help</u>):	C Melody 1	
	Melody 2	
	C Use Phone Settings	
Email:		
Email Address:		
Send Mailbox Digest:	⊙ on ⊜ off	
Save		

Also, you should enter your web password here. This password protects the web access; the password for registering your phone is a different one which can only be changed by the administrator. Please also not that entering your password in an insecure http connection might be captured by an eavesdropper. If you are using https, your data is safe.

The snom 4S offers you several ways to redirect your calls. Often, you want to redirect your phone calls to another number (we call this "home", but it does not have to be necessarily your home number). The mailbox is always used if reaching timed out. The timeout period is up to you. If you don't provide a timeout value, the proxy chooses 20 seconds.

When someone calls you on your account, the proxy inserts a hint into the invitation message that indicates the phone how to ring. This is helpful because you don't have to look at the phone to find out who is being called. To check the ring tone, just click on the links shown in the dialog. Your PC will give you an idea on how it sounds. If you want to leave the ring tone to the phone, select "Use Phone Settings".

The email address is important if you wish to receive email notifications when someone left a message on your mailbox. You can select the mode in which the mail is set up.

Specifying where you are

On the left side of the screen, you can click on where you are.

In the Office

Means that the proxy should search where you are registered. If you are not registered anywhere the proxy will directly do to the mailbox, if it has been set up.

At Home

Will try to get you in the address that you specified as "home". Also, if the proxy could not find you there, it will go to the mailbox.

When you select **On the Road**, you need to specify where the proxy should look for use. You may enter a SIP URL here, or just a telephone number. The proxy will automatically translate the location into a valid SIP URL.

If you select **Offline**, the proxy will immediately go to the mailbox.

Conferencing

The snom 4S offers you a simple way to initiate a conference. All you need to do is fill in the numbers of the participants and press start.

1:	2:
3:	4:
5:	6:
7:	8:
Start	

Please make sure that you are really available on the location that you specified in the navigation bar. The proxy will first initiate a call to you. If you pick up, the proxy will initiate the calls to the other participants.

The conferencing feature needs to be enabled by your domain administrator.

Messages

If you are not registered, the proxy stores messages for you and delivers them when you register again. In this folder you can see the messages which are stored for you.

Speed Dial Lists

If your administrator assigned you the responsibility of a speed dial list, you will see additional links in your navigation bar. You see a simple example below, where the number 911 is replaced with the SIP URL "sip:christian@stredicke.de" and the number 912 with "sip:cs@snom.com".



If you have just a few speed dial entries, you might want to edit them directly in the window in the web browser. The format is simple and you will find a little description already on the web page. To define the speed dial mapping, enter one line per mapping. The first word indicates the speed dial number and the second word (separated by space) indicates the mapped number. You may enter as many mappings as you need.

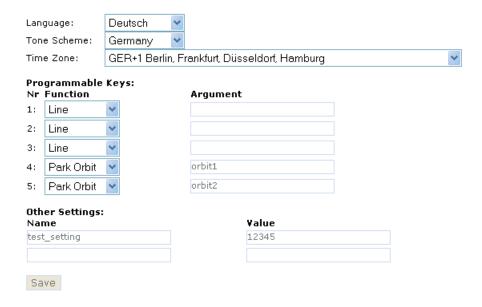
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If you maintain long lists of speed dial numbers, we recommend using a text editor to edit the file in a separate space and copy & paste this file into the web browser edit field.

Setting Groups

Setting groups are similar to the speed dial list in a way that you might have been assigned for administration of such a setting group.

Normally you need to change only a few settings. You may select the language from a pull down menu. The tone scheme defines how the ring back and busy tones will sound on your phones. The time zone is important to make sure that the phones have the right time.



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Programmable Keys

If your phones have programmable keys, you may specify here what their function is. This is a helpful function in groups that should see the same park orbit or have the same intercom addresses.

The five programmable keys on snom200, for example, have the following options:

- Line
- Destination
- Intercom
- Park Orbit
- Voice Recorder

Each of these buttons has an LED indicating the status of the respective programmable key at any given time.

Some features are common to all these options:

- a. Pressing a button when its LED is blinking and the phone is ringing will receive the call.
- b. Pressing the button when a call is in progress at that key, indicated by the constantly on LED, will put the call on hold.
- c. Pressing a button while editing a number for dialing at that key will erase the number and the phone will go to idle state.

Each one of these different options will now be explained in detail.

Line

"Line" can be used in one of these ways:

a. To map a local sip line:

A user can assign the local lines to programmable keys by selecting this option and setting the url of the local line as argument to that key setting e.g. if a phone has 2 registrations 501@my.proxy.com and 502@my.proxy.com. The user has the option to map two programmable keys to each one of these lines by selecting ,Line' and setting the respective sip url as argument. If so, all the calls to a particular line will go to its matching programmable key e.g. if 502@my.proxy.com was mapped at Key P2, the led on that key will start blinking if there is an incoming call on that line. Similarly, if the user pressed P2 in the idle state, 502@my.proxy.com will become the active line for that call. This feature is to facilitate the customers to use their different sip accounts as they would use different PSTN phone lines. It is also possible to assign different ringtones for each sip line to make an acoustic differentiation. This can either be done at the proxy or at Settings/Sip/Lines page on the phone web interface.

b. To map a sip url for call pickup:

Selecting this option with a sip url as argument will subscribe for dialog state changes of the phone with that registration. The led on that key will show the status of the registration as idle, talking or ringing by variable frequency of blinking. This allows the user to pickup a ringing call remotely, just by the press of a button. An example of its usage can be mapping the office reception phone line at the phone of company secretary. If for some reason a ringing phone is not answered at the reception, secretary can see its ringing status by the blinking led and pickup the call by just pressing that programmable key. No calls go unanswered this way.

c. Free Key:

"Line" is also the default setting for the programmable keys. If no argument is set, the keys are treated as free. Outgoing and incoming calls, not bound to any other key, go to the first such free key.

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Destination

The user can map a sip url to a particular programmable key by setting this option and providing the url as argument. This option can be used in the following ways:

- a. If the sip line 505@my.proxy.com is bound to key P3 with this option, all calls coming to the phone from this number will go to P3.
- b. If on the other hand, P3 is pressed during the idle state, 505@my.proxy.com will be dialed as it is set as destination for this key.
- c. In the ringing state, if the call comes from any line other than 505@my.proxy.com, pressing P3 will transfer the incoming call to 505@my.proxy.com.

Intercom

This option is similar to "Destination" except that pressing the key bound to, Intercom' will enable the intercom mode and the phone will be directly connected to the set snom phone if the other side has enabled the intercom mode. This feature is useful in an office environment as a quick access button to connect to the operator or secretary.

Park Orbit

snom4s provides its customers to setup parking orbits at the media server. Calls can be parked and picked up in these orbits. The option "Park Orbit" makes this possible on the side of the phone. Lets suppose key P4 is bound to orbit1@my.proxy.com. The led on this key shall now display the status of calls, if any, parked on this orbit. If it is blinking, that means a call is parked there and the user can easily pick up that call by pressing P4. If on the other hand, the user wants to park a call; pressing P4 during a call will park that call at orbit1@my.proxy.com till the same user or somebody else picks it up later. The other side will hear the holding music. This feature is useful for call center environments and all such places where there is a great inflow of calls and some kind of queuing is required to manage them.

Voice Recorder

This option can be setup with a valid voice recording account. Supposing vr@my.proxy.com offers voice recording and is bound to key P5 on the phone. Its usage is explained in the following:

- a. During a call, by pressing P5 the user will be able to record the conversation he is having with the other party. Another press of the button P5 will end the recording process. The recorded media can later be listened to by accessing the recorder account vr@my.proxy.com.
- b. This feature is also useful to record small messages or memos to self. By pressing P5 in the idle state a user can record an important message to be listened later.
- c. Same is true to record the proceedings of a debate or discussion.
- d. To keep audio minutes of a meeting.
- e. To record an important conference call hosted at the phone.

There are many other settings like outbound proxy or transfer key selection. In most of the cases, you don't need to change their value. However, if they are the same across your group, we recommend that you change their value in the "other settings" fields. To add a setting, use the blank line at the bottom. If you want to change a setting, just change the value in the fields. To remove a setting, remove the name in the field.

Please note that the plug and play concept is relatively new in the SIP community and the support across different vendors not optimal at the moment. If you use snom phones, you will be able to configure these devices from the snom 4S

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Reader's Feedback

snom technology AG welcomes your evaluation of this manual and any suggestions you may have. These help us to improve the quality and usefulness of our documentation.

Please send your comments and suggestions to:

snom technology AG

Attention: Marketing Department

Gradestr. 46, 12347 Berlin, Germany

FAX: +49 (30) 39833 111

Manual Name: User Manual, snom 4S SIP Registrar/Proxy

Software Version: 2.41 Date: October 15, 2003

	Excellent	Good	Fair	Poor			
How would you rate the manual overall?							
Are the installation instructions effective?							
Are the Configuration Instructions effective?							
Is the manual properly organized?							
Are the illustrations usefull and easy to understa	nd?						
Are the suggested and default values useful?							
Is the index useful?							
Did you find any errors in the manual? (Please reference page and paragraph)							
How might we improve this manual?							
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snom technology AG Gradestraße 46 12347 Berlin tel/enum: +49 30 39833-0

fax: +49 30 39833-111 sip: info@snom.com mail: info@snom.com

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